CLAIMS

What is Claimed is:

1	1.	A linear polymer comprising:
2		at least one bisphenol monomer attached to at least one chromophore, and at least
3		one first diepoxy monomer including at least one fluorine atom, and at least one second
4		diepoxy monomer including no fluorine atoms; and
5		wherein said linear polymer includes an index of refraction between the range of
6		about 1.58 to about 1.66 measured at a wavelength of about 1300 nm.
1	2.	The polymer according to Claim 1, wherein said polymer molecular weight average is
2		between about 10,000 and about 100,000 daltons.
1	3.	The polymer according to claim 1, wherein said bisphenol component further comprises
2		a second chromophore comprising at least one of nitrophenyl azo, azomethine, stilbene,
3		hydrazone, nitrophenyl hydrazone chromophores, and thienylene-vinylene.
1	4.	The polymer according to claim 1, wherein said bisphenol monomer further comprises
2		two nitrophenyl hydrazone chromophores.
1	5.	The polymer according to claim 1, wherein said first diepoxy monomer comprising at
2		least one of:
3		

$$CF_3 \qquad CF_3 \qquad$$

1 6. The polymer according to claim 1, wherein said second diepoxy monomer comprising 2 at one least of:

$$0 \xrightarrow{\qquad \qquad CH_3 \qquad } 0 \xrightarrow{\qquad \qquad CH_3 \qquad } 0$$

$$\text{diepoxy X}^1$$

5

$$0 \longrightarrow 0 \longrightarrow 0$$
 diepoxy X^2

The polymer according to Claim 1, wherein said bisphenol monomer comprising at least one of:

3

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